

OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

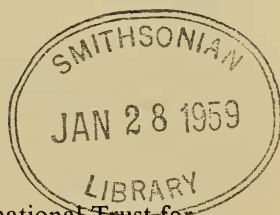
Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

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OPINION 532

Validation under the Plenary Powers of the specific name
verrucosa Sars, 1901, as published in the combination
Alona verrucosa (Class Crustacea, Order Cladocera)



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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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OPINION 532

VALIDATION UNDER THE PLENARY POWERS OF THE
SPECIFIC NAME "VERRUCOSA" SARS, 1901, AS
PUBLISHED IN THE COMBINATION "ALONA
VERRUCOSA" (CLASS CRUSTACEA, ORDER
CLADOCERA)

RULING:—(1) The following action is hereby taken
under the Plenary Powers :—

- (a) The under-mentioned specific name is hereby
suppressed for the purposes both of the Law of
Priority and of the Law of Homonymy :—

verrucosa Lutz, 1879, as published in the com-
bination *Alona verrucosa* ;

- (b) The under-mentioned specific name is hereby
suppressed for the purposes of the Law of
Priority but not for those of the Law of
Homonymy :—

pulchra Hellich, 1874, as published in the com-
bination *Alona pulchra*.

(2) The under-mentioned generic names are hereby
placed on the *Official List of Generic Names in Zoology*
with the Name Numbers severally specified below :—

- (a) *Alona* Baird, 1843 (gender : feminine) (type species,
by selection by Johnson (D.S.) (1956) : *Lynceus*
quadrangularis Müller (O.F.), 1785) (Class Crus-
tacea, Order Cladocera) (Name No. 1317) ;

- (b) *Leydigia* Kurz, 1874 (gender : feminine) (type
species, by original designation of *Lynceus quad-*
rangularis Leydig, 1860, and through *Declaration*
21 : *Alona leydigi* Schödler, 1863, a substitute

nominal species for *Lynceus quadrangularis* Leydig, 1860, the name of which is invalid as a junior homonym of *Lynceus quadrangularis* Müller (O.F.), 1776 (Class Crustacea, Order Cladocera) (Name No. 1318) ;

- (c) *Lynceus* Müller (O.F.), 1776 (gender : masculine) (type species, by selection by Latreille (1810) : *Lynceus brachyurus* Müller (O.F.), 1776) (Class Crustacea, Order Conchostraca) (Name No. 1319).

(3) The under-mentioned specific names are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below :—

- (a) *verrucosa* Sars, 1901, as published in the combination *Alona verrucosa*, as validated under the Plenary Powers in (1)(a) above (Name No. 1582) ;
- (b) *rectangula* Sars, 1862, as published in the combination *Alona rectangula* (Name No. 1583) ;
- (c) *quadrangularis* Müller (O.F.), 1776, as published in the combination *Lynceus quadrangularis* (specific name of type species of *Alona* Baird, 1843) (Name No. 1584) ;
- (d) *leydigi* Schödler, 1863, as published in the combination *Alona leydigi* (specific name of type species of *Leydigia* Kurz, 1874) (Name No. 1585) ;
- (e) *brachyurus* Müller (O.F.), 1776, as published in the combination *Lynceus brachyurus* (specific name of type species *Lynceus* Müller (O.F.), 1776) (Name No. 1586).

(4) The under-mentioned generic name is hereby placed on the *Official Index of Rejected and Invalid Generic Names in Zoology* with the Name Number 1220 :—

Lynceus Gray (J.E.), 1821 (a junior homonym of *Lynceus* Müller (O.F.), 1776).

(5) The under-mentioned specific names are hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name Numbers severally specified below :—

- (a) *verrucosa* Lutz, 1879, as published in the combination *Alona verrucosa*, as suppressed under the Plenary Powers in (1)(a) above (Name No. 561) ;
- (b) *pulchra* Hellich, 1874, as published in the combination *Alona pulchra*, as suppressed under the Plenary Powers in (1)(b) above (Name No. 562) ;
- (c) *tuberculata* Hudendorff, 1876, as published in the combination *Alona tuberculata* (a junior homonym of *tuberculata* Kurz, 1874, as published in the combination *Alona tuberculata*) (Name No. 563) ;
- (d) *quadrangularis* Leydig, 1860, as published in the combination *Lynceus quadrangularis* (a junior homonym of *quadrangularis* Müller (O.F.), 1785, as published in the combination *Lynceus quadrangularis*) (Name No. 564).

(6) The under-mentioned family-group name is hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Number 249 :—

LYNCEIDAE Sayce (O.A.), 1902 (type genus : *Lynceus* Müller (O.F.), 1776).

I. THE STATEMENT OF THE CASE

On 8th May 1954 Mr. D. S. Johnson (*University of Malaya, Singapore*) addressed a preliminary communication to the Office of the Commission on the question of the possible use by the

Commission of its Plenary Powers for the purpose of validating the specific name *verrucosa* Sars, 1901, as published in the combination *Alona verrucosa* (Class Crustacea, Order Cladocera), by suppressing the senior homonym *verrucosa* Lutz, 1879, as published in the combination *Alona verrucosa*. There followed considerable correspondence between the Secretary and Mr. Johnson, in the later stages of which Dr. J. P. Harding (*British Museum (Natural History), London*) also took part. This led on 22nd May 1956 to the submission to the Commission by Mr. Johnson of the following definitive application :—

**Proposed use of the Plenary Powers to validate the specific name
“verrucosa” Sars, 1901, as published in the combination
“Alona verrucosa” (Class Crustacea, Order
Cladocera)**

By D. S. JOHNSON

(*University of Malaya, Singapore*)

The object of the present application is to ask the International Commission to provide a firm nomenclatorial basis for the specific name *verrucosa* Sars, 1901, as published in the combination *Alona verrucosa* (Class Crustacea, Order Cladocera). This is a common pan-tropical species, the name currently used for which is invalid as a junior homonym of an identical name previously published by Lutz. The reason why the validation of the specific name *verrucosa* Sars is particularly to be desired is that, as is shown below, if this name were to be rejected, there is no name which would clearly be applicable to this well-known species, there being three other names which might be subjectively applied to it by specialists. There would therefore be a continuing prospect of instability and confusion in the nomenclature of this species. The facts of this case are set out briefly below.

2. In 1901 (: 56, pl. IX, figs. 7, 7a) Sars described a species of Cladocera to which he applied the name *Alona verrucosa*. This species is allied to, but is accepted as distinct from *Alona rectangula* Sars, 1862 (: 278). This latter species is now better understood than formerly, having been defined and redescribed by Jenkin in 1934. It has since been recorded by Brehm (1937) who has identified a number of other nominal species with it.

3. Unfortunately, in 1879 (: 44) Lutz established a nominal species *Alona verrucosa* which cannot be identified with certainty. It is

possible that the species so named is the same as that to which later Sars gave an identical name, but it is probable that it is not. The name *Alona verrucosa* Lutz must be regarded as being a *nomen dubium*, for its interpretation is likely to differ from one author to another. These differences of opinion are likely to give rise to considerable confusion, unless the Commission intervenes, since the name *verrucosa* is likely to be applied by some authors to the common species with which the present application is concerned (i.e. to *verrucosa* Sars) though with Lutz treated as the author, while other authors may be expected to apply what they consider to be the next junior synonym to Sars' species.

4. There are two nominal species which were described prior to the publication of the name *A. verrucosa* Sars, which it is possible are the same as Sars' species. These are : (1) *Alona pulchra* Hellich, 1874 (: 215, 219) and (2) *Alona tuberculata* Hudendorf, 1876 (: 54, pl. II, fig. 6). The second of these names need not detain us, for it is invalid, being a junior homonym of *Alona tuberculatus* Kurz 1874 (itself, a subjective junior synonym of *Alona guttata* Sars, 1862). The nominal species *Alona pulchra* Hellich is of uncertain identity. Some of the taxa referred to this species show strong resemblances to *verrucosa* Sars, but Brehm (1933a) has pointed out that Hellich's species is in reality quite distinct. Thus, the name *Alona pulchra* Hellich must be regarded as a *nomen dubium* and one moreover which, unless suppressed by the Commission, is likely to give rise to confusion through being applied to the Sars' *verrucosa* by those authors who reject Sars' name as a junior homonym of *verrucosa* Lutz.

5. Another name which might be applied to *verrucosa* Sars by authors who reject that name as a junior homonym of *verrucosa* Lutz, is *alonopsiformis* Brehm, 1933, as published in the combination *Alona alonopsiformis*. Brehm himself (1937) considers this to be identical with *Alona verrucosa* Sars.

6. A further difficulty and source of possible confusion arises from the fact that in 1905 Daday established a nominal species *Alona anodonta*, which it is possible is identical with *Alona verrucosa* Sars. However, according to Daday, his species lacks the teeth on the labrum which is one of the distinguishing features of *verrucosa* Sars. The question whether these two nominal species represent the same taxon is thus very much a matter of opinion. Brehm (1933a ; 1937), for example, does not identify these nominal species with one another.

7. It will be seen, therefore, that, if the name *Alona verrucosa* Lutz were to be permitted to retain its status as an available name, the species now known as *Alona verrucosa* Sars, 1901, might, according to the subjective taxonomic judgments by individual workers, appear in the literature under any one of no less than four following specific

names : (1) *verrucosa* Lutz, 1879 ; (2) *anodonta* Daday, 1905 ; (3) *alonopsiformis* Brehm, 1933 ; or even (4) *pulchra* Hellich, 1874. If, on the other hand the two *nomina dubia* here in question, namely (a) *pulchra* Hellich and (b) *verrucosa* Lutz, were to be suppressed by the Commission under its Plenary Powers, all possible source of confusion would be removed. So far, the species described by Sars as *verrucosa* has been known only by that name and no confusion exists, but, as has been shown, that name at present possesses no solid legal foundation. It is to provide that name with such a foundation and to prevent the confusion which would arise if an attempt were to be made to reject it on any of the grounds described above that the present application is submitted to the Commission.

8. For the sake of completeness it would be helpful if, when dealing with the present application, the Commission were at the same time to place on the *Official List of Generic Names in Zoology* the name *Alona* Baird, 1843 (*Ann. Mag. nat. Hist.* 11 : 92) that being the name of the genus to which the species discussed in the present application are referred. The genus *Alona* Baird is commonly treated as being typified by the nominal species *Lynceus quadrangularis* Müller (O.F.), 1785 (: 199, pl. IX, figs. 1—3) and it has sometimes been suggested that this species was actually so selected by Lilljeborg (1900, *Cladocera Sueciae* : 446, footnote). Reference to Lilljeborg's work shows, however, that "rigidly construed" (as required by Rule (g) in Article 30 of the *Règles*) Lilljeborg did not select the above to be the type species of *Alona* Baird, all that he did being to cite it "als ein typischer Vertreter" of the genus. I have been unable to trace in the literature any valid type selection for the genus *Alona* Baird and Dr. J. P. Harding (*British Museum (Natural History), London*), whom I have consulted, informs me that he also is unaware of any such selection. On his suggestion and in order to bring this issue to a close I now here select the nominal species *Lynceus quadrangularis* Müller (O.F.), 1785, to be the type species of the genus *Alona* Baird.

9. In 1860 (: 221, pl. VIII, fig. 59) Leydig published the name *Lynceus quadrangularis* as the name for an entirely different species from that to which this name had been given by Müller in 1785. Fourteen years later Kurz in 1874 established the nominal genus *Leydigia* (: 57) and designated *Lynceus quadrangularis* Leydig, 1860, as type species. As already noted, that specific name is a junior primary homonym of the name *Lynceus quadrangularis* Müller, 1785, and is therefore invalid. This nominal species was re-named *Alona leydigi* by Schödler in 1863 (: 27). I am informed by the Secretary to the Commission that under a recent decision embodied in *Declaration* 21 (now in the press¹) the Commission has ruled that, where one of two or more objectively

¹ The *Declaration* here referred to was published on 19th June, 1956 (*Ops. Decls. int. Comm. zool. Nomencl.* 12 : i-viii).

identical nominal species is designated, indicated or selected as the type species of a genus, that genus shall be cited as having as its type species the oldest established of the nominal species concerned. Since the nominal species *Lynceus quadrangularis* Leydig, 1860, and *Alona leydigi* Schödler, 1863, are objectively identical with one another (Schödler's name *leydigi* having been published as a substitute for the invalid name *quadrangularis* Leydig), it follows that under the *Declaration* referred to above it is the nominal species *Alona leydigi* Schödler, 1863, and not the nominal species *Lynceus quadrangularis* Leydig, 1860, which is to be treated as being the type species of *Leydigia* Kurz, 1874. It is recommended that the present opportunity should be taken to place the names *Leydigia* Kurz and *leydigi* Schödler on the *Official Lists* of valid generic and specific names respectively and the name *quadrangularis* Leydig on the *Official Index of Rejected and Invalid Specific Names in Zoology*. In order fully to cover all aspects of the present case it would be desirable also that the generic name *Lynceus* Müller (O.F.), 1776 (*Zool. dan. Prodr.* : xxvii, 199) (Class Crustacea, Order Conchostraca) should be placed on the *Official List of Generic Names in Zoology* with *Lynceus brachyurus* Müller (O.F.), 1776 (*ibid.* : 199) as type species by selection by Latreille, 1810 (*Consid. gén. Ordre nat. Anim. Classes Arachn. Crust. Ins.* : 421, 91). At the same time the specific name *brachyurus* Müller, 1776, as published in the above combination, should be placed on the *Official List of Specific Names in Zoology*. Finally, the name *Lynceus* Gray (J.E.), 1821 (*London med. Repository* 15 : 302) (Class Mammalia), should, as a junior homonym of *Lynceus* Müller (O.F.), 1776, be placed on the *Official Index of Rejected and Invalid Generic Names in Zoology*.

10. Neither the generic name *Alona* Baird nor the name *Leydigia* Kurz has been taken as the base for a family-group name. No family-group-name problem therefore arises, so far as the names of genera of the Cladocera dealt with in the present application are concerned. The generic name *Lynceus* Müller, 1776 (Order Conchostraca) was, however, taken as the base for the name of a family-group taxon by Sayce (O.A.), in 1902 (*Proc. Roy. Soc. Victoria* (n.s.) 15 : 257). The family-group name LYNCEIDAE Sayce, 1902, should now be placed on the *Official List*.

11. For reasons explained above, I ask the International Commission on Zoological Nomenclature :—

(1) to use its Plenary Powers to suppress :—

- (a) the under-mentioned specific name for the purposes both of the Law of Priority and of the Law of Homonymy :
verrucosa Lutz, 1879, as published in the combination
Alona verrucosa ;

- (b) the under-mentioned specific name for the purposes of the Law of Priority but not for those of the Law of Homonymy : *pulchra* Hellich, 1874, as published in the combination *Alona pulchra* ;
- (2) to place the under-mentioned generic names on the *Official List of Generic Names in Zoology* :—
- (a) *Alona* Baird, 1843 (gender : feminine) (type species, by selection in paragraph 8 of the present application : *Lynceus quadrangularis* Müller (O.F.), 1785) (Class Crustacea, Order Cladocera) ;
- (b) *Leydigia* Kurz, 1874 (gender : feminine) (type species by original designation of *Lynceus quadrangularis* Leydig, 1860, and through *Declaration 21* : *Alona leydigi* Schödler, 1863 (a substitute nominal species for *Lynceus quadrangularis* Leydig, 1860, the name of which is invalid as a junior primary homonym of *Lynceus quadrangularis* Müller (O.F.), 1785)) (Class Crustacea, Order Cladocera) ;
- (c) *Lynceus* Müller (O.F.), 1776 (gender : masculine) (type species, by selection by Latreille (1810) : *Lynceus brachyurus* Müller (O.F.), 1776) (Class Crustacea, Order Conchostraca) ;
- (3) to place the under-mentioned specific names on the *Official List of Specific Names in Zoology* :—
- (a) *verrucosa* Sars, 1901, as published in the combination *Alona verrucosa*, as validated under the Plenary Powers under (1)(a) above ;
- (b) *rectangula* Sars, 1862, as published in the combination *Alona rectangula* ;
- (c) *quadrangularis* Müller (O.F.), 1785, as published in the combination *Lynceus quadrangularis* (specific name of type species of *Alona* Baird, 1843) ;
- (d) *leydigi* Schödler, 1863, as published in the combination *Alona leydigi* (specific name of type species of *Leydigia* Kurz, 1874) ;
- (e) *brachyurus* Müller (O.F.), 1776, as published in the combination *Lynceus brachyurus* (specific name of type species of *Lynceus* Müller (O.F.), 1776) ;
- (4) to place the under-mentioned generic name on the *Official Index of Rejected and Invalid Generic Names in Zoology* : *Lynceus* Gray (J.E.), 1821 (a junior homonym of *Lynceus* Müller (O.F.), 1776) ;

(5) to place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—

(a) the two specific names specified in (1) above, as there respectively suppressed under the Plenary Powers ;

(b) *tuberculata* Hudendorff, 1876, as published in the combination *Alona tuberculata* (a junior primary homonym of *tuberculata* Kurz, 1874, as published in the combination *Alona tuberculata*) ;

(c) *quadrangularis* Leydig, 1860, as published in the combination *Lynceus quadrangularis* (a junior primary homonym of *quadrangularis* Müller (O.F.), 1785, as published in the combination *Lynceus quadrangularis*) ;

(6) to place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* : LYNCEIDAE Sayce (O.A.), 1902 (type genus : *Lynceus* Müller (O.F.), 1776).

References :

Brehm, V., 1933 *Zool. Anz.* 104 : 79

Brehm, V., *id.*, 1933a "Die Cladoceren der Deutschen Limnologischen Sunda-Expedition". *Arch. f. Hydrobiol.*, Suppl. 11 : 631—771

Brehm, V., *id.*, 1937 "Brasilianische Cladoceren". *Int. Rev. Ges. Hydrobiol. Plankt.* 35 : 497—514

Daday, E., 1905 "Untersuchungen über die Süßwasser-Mikrofauna Paraguays". *Zoologica* 44

Hellich, B., 1874, "Über die Cladocerenfauna Böhmens". *SitzBer. K. Böhm. Ges. d. Wissenschaften* 1874 : 215—219

Hudendorff, A., 1876 "Beiträge zur Kenntnisse der Süßwasser Cladoceren" *Bull. Soc. imp. Nat. Moscou* 51 (No. 1) : 54, pl. II, fig. 6

Jenkin, P. M., 1934 "Reports on the Percy Sladen Expedition to some Rift Valley Lakes in Kenya in 1929,—VI. Cladocera from the Rift Valley Lakes in Kenya". *Ann. Mag. nat. Hist.* (10) 13 : 281—308

Kurz, W., 1874 "Dodekas neuer Cladoceren nebst einer kurzen Übersicht der Cladocerenfauna Böhmens". *SitzBer. K. Akad. Wiss. Wien, Math. Naturw. Kl.* 70 (No. 1) : 57

Leydig, F., 1860 *Naturgeschichte der Daphniden* : 221, pl. VIII, fig. 59

Lutz, A., 1879 "Untersuch über die Cladoceren der Umbugung von Bern". *Mitt. nat. Ges. Bern.* 1879 : 38—54

- Matile, P., 1890 "Die Cladoceren der Umgegend von Moskau". *Bull. Soc. imp. Nat. Moscou* (n.s.) **4** : 148
- Sars, G. O., 1862 "Over de i Omegnen af Christiania forekommende Cladoceren" *Forh. Vidensk.-Selsk. Kristiania* **1861** : 287
- , *id.*, 1901 "Contributions to the knowledge of the Fresh-water Entomostraca of South America, as shown by artificial hatching from dried material". *Arch. Math. Naturv. Krist.* **23** (No. 3) : 1—102 ..
- Schödler, J. E., 1863 *Neue Beiträge zur Naturgeschichte der Cladoceren* : 27

II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application : Upon the receipt of Mr. Johnson's preliminary enquiry the question of the possible validation under the Plenary Powers of the specific name *verrucosa* Sars, 1901, as published in the combination *Alona verrucosa* (Class Crustacea, Order Cladocera), was allotted the Registered Number Z.N.(S.) 840.

3. Publication of the present application : The present application was sent to the printer on 31st May 1956 and was published on 24th August of the same year in Double-Part 7/8 of Volume 12 of the *Bulletin of Zoological Nomenclature* (Johnson, 1956, *Bull. zool. Nomencl.* **12** : 200—205).

4. Issue of Public Notices : Under the revised procedures prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 24th August 1956 (a) in Double-Part 7/8 of Volume 12 of the *Bulletin of Zoological Nomenclature* (the Part in which Mr. Johnson's application was published) and (b) to the other prescribed serial publications. In addition such Notice was given to four general zoological serial publications.

5. No Objection Received : No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

6. Issue of Voting Paper V.P.(57)28: On 15th March 1957 a Voting Paper (V.P.(57)28) was issued in which the Members of the Commission were invited to vote either for, or against, " the proposal relating to the specific name *verrucosa* Sars, 1901, as published in the combination *Alona verrucosa*, as set out in Points (1) to (6) in paragraph 11 on pages 203—204 of Volume 12 of the *Bulletin of Zoological Nomenclature* " [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*].

7. The Prescribed Voting Period: As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th June 1957.

8. Particulars of the Voting on Voting Paper V.P.(57)28: At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)28 was as follows :—

(a) *Affirmative Votes had been given by the following twenty-two (22) Commissioners (arranged in the order in which Votes were received) :*

Mayr ; Vokes ; Hering ; Boschma ; Lemche ; Riley ;
Prantl ; Holthuis ; Dymond ; Esaki ; Jaczewski ; do
Amaral ; Key ; Bonnet ; Hemming ; Mertens ;
Tortonese ; Cabrera ; Kühnelt ; Stoll ; Bradley (J.C.) ;
Sylvester-Bradley ;

(b) *Negative Votes, one (1) :*

Bodenheimer ;

(c) *Voting Papers not returned, two (2) :*

Hankó ; Miller.²

9. Declaration of Result of Vote: On 16th June 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)28, signed a Certificate that the Votes cast were as set out in paragraph 8 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

10. Preparation of the Ruling given in the present "Opinion": On 28th April 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)28.

11. Original References for Generic and Specific Names: The following are the original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

Alona Baird, 1843, *Ann. Mag. nat. Hist.* **11** : 92

brachyurus, *Lynceus*, Müller (O.F.), 1776, *Zool. dan. Prodr.* : 199

leydigi, *Alona*, Schödler, 1863, *Neue Beitr. Naturgesch. Cladoc.* : 27

² After the close of the Prescribed Voting Period a late affirmative vote was received from Commissioner Miller.

Leydigia Kurz, 1874, *SitzBer. Kais. Akad. Wiss. Wien* (Math. Nat. Cl.) **70** (No. 1) : 57

Lynceus Müller (O.F.), 1776, *Zool. dan. Prodr.* : xxvii, 199

Lynceus Gray (J.E.), 1821, *London med. Reposit.* **15** : 302

pulchra, *Alona*, Hellich, 1874, *SitzBer. Königl.-böhm. Ges. Wiss.* **1874** : 215, 219

quadrangularis, *Lynceus*, Müller (O.F.), 1785, *Zool. dan. Prodr.* : 72, 199, pl. IX, figs. 1—3

quadrangularis, *Lynceus*, Leydig, 1860, *Naturgesch. Daphniden* : 221, pl. VIII, fig. 59

rectangula, *Alona*, Sars, 1862, *Forh. Vidensk.-Selsk. Christiania* **1861** : 278

tuberculata, *Alona*, Hudendorf, 1876, *Bull. Soc. imp. Nat. Moscou* **51** (No. 1) : 54, pl. II, fig. 6

verrucosa, *Alona*, Lutz, 1879, *SitzBer. naturf. Ges. Leipzig* **5** : 44

verrucosa, *Alona*, Sars, 1901, *Arch. Math. Naturvidensk.* **23** (No. 3) : 56, pl. IX, figs. 7, 7a

12. References for Selections of Type Species of Nominal Genera :

The following are the references for selections of type species for nominal genera specified in the Ruling given in the present *Opinion* :—

For <i>Alona</i> Baird, 1843	Johnson (D.S.), 1956, <i>Bull. zool. Nomencl.</i> 12 : 202
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For <i>Lynceus</i> Müller (O.F.), 1776	Latreille, 1810, <i>Consid. gén. Anim. Crust. Arach. Ins.</i> : 421, 91
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13. References for Family-Group-Names : The following is the reference for the family-group name placed on the *Official List of Family-Group Names in Zoology* by the Ruling given in the present *Opinion* :—

LYNCEIDAE Sayce (O.A.), 1902, *Proc. roy. Soc. Victoria* (n.s.) **15** : 257

14. Compliance with Prescribed Procedures: The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

15. "Opinion" Number: The present *Opinion* shall be known as *Opinion* Five Hundred and Thirty-Two (532) of the International Commission on Zoological Nomenclature.

DONE in London, this Twenty-Eighth day of April, Nineteen Hundred and Fifty-Eight.

*Secretary to the International Commission
on Zoological Nomenclature*

FRANCIS HEMMING